

Customer No. 24498
Attorney Docket No. PU020105
Final Office Action Date: August 20, 2008

Remarks/Arguments

Claims 1-24 are pending in this application, and rejected in the final Office Action of August 20, 2008. No claim amendments are presented herein. However, a listing of the pending claims in the application accompanies this response for the Examiner's convenience.

Re: Claims 1, 7, 14 and 21-24

Claims 1, 7, 14 and 21-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,728,965 issued to Mao (hereinafter, "Mao") in view of U.S. Patent Publication No. 2001/0033342 by Kim (hereinafter, "Kim"). Applicants respectfully traverse this rejection for at least the following reasons.

At the outset, Applicants note that the present invention addresses and solves the problem that in a digital television system, in order to perform a channel change, the receiver must first wait to receive program specific information that is received via the incoming datastream before programming associated with a newly selected channel can be decoded and displayed. The program specific information must be extracted, and elements of the receiver must be configured based on this information in order to receive desired channel and begin decoding. The program specific information may include for example, program association table data, and program map table data (see page 1, line 31 to page 2, line 8; page 5, lines 24 to 28 of Applicants' specification). Additionally, the incoming datastream may also include sequence headers that must be acquired before decoding can begin (see page 6, lines 12 to 13 of Applicants' specification). The delay in acquiring the necessary program specific information and sequence headers may cause a delay in changing from one channel to another.

The present invention addresses and solves this problem by providing for the ***initiation of a data caching operation immediately after a channel change event***. The caching operation enables incoming sequence header data to be cached so that it may be found quickly after the program association table data and program map table data is captured and processed (see page 6, lines 26-32 of Applicants' specification).

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Thus, a notable aspect of the claimed invention is that the caching operation is initiated *in response to* receiving a channel change command.

In that regard, independent claim 1 recites:

"... *initiating caching* of an incoming datastream associated with a newly selected channel *in response to the channel change command*, the incoming datastream including program specific information ... transferring the cached data stream for decoding in response to the program specific information. (emphasis added)"

Independent claims 7, 14, 21 and 23 recite features similar to claim 1 above. Applicants submit that neither Mao nor Kim, whether taken individually or in combination, teaches or suggests, *inter alia*, the claimed feature of initiating a caching operation in response to a channel change command, as provided by independent claims 1, 7, 14, 21 and 23.

On page 2 of the final Office Action dated August 20, 2008, the Examiner specifically alleges that the claimed feature of "initiating caching of an incoming data stream associated with a newly selected channel in response to the channel change command" is disclosed on column 2, lines 32-36 of Mao. Applicants respectfully disagree. In particular, Applicants note that column 2, lines 32-44 of Mao state:

"Each digital video signal includes a synchronization frame. The subject channel changer captures the multiple compressed video signals and stores each signal in a cache buffer. A processor is used to index or "point to" the respective synchronization frames for each buffered signal.

When a subscriber requests a specific channel or video service, the processor can immediately access the requested video signal at a synchronization frame and direct the video stream to the subscriber since the processor already has the position of the synchronization frame of each video signal. Accordingly, the period of time that the subscriber previously had to wait for the synchronization frame is eliminated." (emphasis added)

As indicated above, Mao teaches a method in which, when a specific channel is requested (e.g., a channel change event), a processor accesses the requested video

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signal corresponding to the requested channel at a synchronization frame (i.e., an "I" frame) in a cache buffer (see also, column 8, lines 52-55 of Mao). In this manner, Mao expressly teaches a method in which the caching of an incoming datastream is initiated before a channel change command is ever received. In particular, Mao ostensibly teaches a method in which an incoming datastream is continuously cached and output on a first-in, first-out basis (see column 8, lines 14-51 of Mao). Accordingly, Mao fails to teach or suggest, *inter alia*, a method in which a caching operation is initiated in response to a channel change command, as claimed.

Secondary reference, Kim, is relied on for teaching the limitation wherein an incoming data stream includes program specific information (see page 3 of the final Office Action dated August 20, 2008), but also fails to teach or suggest, *inter alia*, the claimed feature of initiating a caching operation in response to a channel change command, as provided by independent claims 1, 7, 14, 21 and 23. As such, Kim is unable to remedy the aforementioned deficiencies of Mao. Accordingly, the proposed combination of Mao and Kim fails to teach or suggest all elements of the claimed invention, and withdrawal of the rejection is respectfully requested.

Re: Claims 2-6, 8-13 and 15-20

Claims 2-6, 8-13 and 15-20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mao in view of Kim, and further in view of U.S. Patent No. 6,490,001 issued to Shintani et al. (hereinafter, "Shintani"). Applicants respectfully traverse this rejection for at least the same reasons pointed out above in conjunction with independent claims 1, 7, 14, 21 and 23 since, as pointed out in Applicants' last Office Action response, Shintani fails to teach or suggest the solution for reducing channel change delay as defined by those independent claims (from which claims 2-6, 8-13 and 15-20 depend). Accordingly, withdrawal of the rejection is respectfully requested.

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Conclusion

In view of the foregoing remarks/arguments, the Applicants believe this application stands in condition for allowance. Accordingly, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the Applicants' attorney at (609) 734-6815, so that a mutually convenient date and time for a telephonic interview may be scheduled. No fee is believed due. However, if a fee is due, please charge the fee to Deposit Account 07-0832.

Respectfully submitted,



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